

University of Missouri-St. Louis

From the Selected Works of Miles Patterson

January, 1992

Expectations, Impressions, and Judgments of Physically Attractive Students: A Review

Miles Patterson, *University of Missouri-St. Louis*

Vicki Ritts

Mark E. Tubbs, *University of Missouri–St. Louis*



Available at: <https://works.bepress.com/miles-patterson/38/>

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/249797861>

Expectations, Impressions, and Judgments of Physically Attractive Students: A Review

Article in Review of Educational Research · January 1992

DOI: 10.3102/00346543062004413

CITATIONS

124

READS

141

3 authors, including:



Vicki Ritts

St. Louis Community College--Meramec

8 PUBLICATIONS 168 CITATIONS

[SEE PROFILE](#)



Miles Patterson

University of Missouri - St. Louis

98 PUBLICATIONS 2,276 CITATIONS

[SEE PROFILE](#)

Some of the authors of this publication are also working on these related projects:



Fortieth Anniversary of the Journal of Nonverbal Behavior [View project](#)



Special issue of the Journal of Nonverbal Behavior [View project](#)

Expectations, Impressions, and Judgments of Physically Attractive Students: A Review

Vicki Ritts

Miles L. Patterson

Mark E. Tubbs

University of Missouri-St. Louis

This article examines the effect of students' physical attractiveness on a variety of judgments made in educational settings. This review discusses the following issues: (a) methodology for studying physical attractiveness in the classroom; (b) teacher judgments, expectations, and impressions of physically attractive students; and (c) the influence of moderator variables such as gender, race, conduct, and physical attractiveness effects. A descriptive and a meta-analytic review of the research indicated that physically attractive students are judged usually more favorably by teachers in a number of dimensions including intelligence, academic potential, grades, and various social skills. The potential influence of moderator variables—such as, student gender, race, and past performance on the physical attractiveness bias—is also examined. Finally, the possible mechanisms responsible for the attractiveness effect and the limitations of this research are discussed.

In American society, there are advantages to being physically attractive. Dion, Berscheid, and Walster (1972) describe this phenomenon as "What is beautiful is good" (p. 285). Over the last 15 years, research has demonstrated the existence of a variety of stereotypes about physically attractive individuals. Stereotypes have direct implications for first impressions and for broader personal and social evaluations. Physical attractiveness affects juror decisions (Sigall & Ostrove, 1975), helping behavior (Benson, Karabenick, & Lerner, 1976), employment opportunities, and job evaluations (Dipboye, Arvey, & Terpstra, 1977). Physical attractiveness is so potent that it even affects the attitudes that parents hold about their own infants (e.g., Ottinger & Berman, 1989; Stephan & Langlois, 1984). The old adage you can't judge a book by its cover may be good advice, but it is difficult to follow.

Physical attractiveness sends a powerful nonverbal message and contributes to the creation of first impressions. The physical attractiveness bias is pervasive in many aspects of American society, including the educational system. This article provides a comprehensive review of teacher impressions, expectations, and judgments of physically attractive students.

Education provides, at least in theory, equal opportunities to all individuals. In practice, however, differential expectations about students are typically present. Many factors are capable of evoking initial expectations and impressions, including not only physical attractiveness but also race, social class, gender, and behavior (see Braun, 1976; Brophy, 1982; Brophy & Good, 1974; Dusek, 1985; Finn, 1972, for general reviews of teacher expectancies). As far back as 1971, Elashoff and Snow summarized the impact of a variety of factors on impression formation.

Teachers form impressions based on physical attractiveness, conduct, achievement, IQ scores, or general characteristics of older siblings or parents. These impressions, based on a day's or a week's experience, may produce expectations about pupil behavior and future achievement. When teachers characterize pupils they are likely to label them as "good" or "bad." Clean children may be "good," dirty children "bad," or they may be "fast" or "slow" learners. (p. 63)

It is no coincidence that physical attractiveness was mentioned first by Elashoff and Snow (1971). Before the various effects of physical attractiveness are considered, it will be useful to examine the methodologies used to study physical attractiveness in the classroom.

Overview of Methodology

It is often remarked that beauty is in the eye of the beholder. In reality, however, it is a mistake to assume that the definition of beauty is completely subjective. Patzer (1985) noted that, although beauty is an abstract concept and there is no absolute in terms of what constitutes attractiveness, individuals do agree in specific judgments of who is and who is not attractive. For example, interrater reliability coefficients of .69 (Salvia, Algozzine, & Sheare, 1977) to .96 (Marwit, Marwit, & Walker, 1978) have been reported. Furthermore, Franzoi and Herzog (1987) reported that males and females do not differ in their judgments of attractiveness.

Researchers often use a truth-of-consensus method for rating physical attractiveness. If a majority of judges rate a photograph of an individual as high, moderate, or low in physical attractiveness, then the person is placed in that category. In many studies, moderate physical attractiveness is often ignored because high and low physical attractiveness results in greater agreement among judges (Patzer, 1985). This represents an important limitation in the existing research, not only in terms of the design but also in terms of the external validity of the results.

Most studies in educational settings manipulate attractiveness by selecting facial photographs and placing them in a *cumulative folder* that also contains the child's school record. A child's appearance and school record are two of the most common sources of information that teachers use to form impressions. The cumulative folder is used to examine teachers' judgments and evaluations of attractive and unattractive students. For example, teachers might receive a folder containing an academic profile of a student or a statement of a student's transgression along with a photograph (e.g., Clifford & Walster, 1973; Marwit, Marwit, & Walker, 1978). The academic description or the transgression is held constant while the attached photo is varied to portray either an attractive or unattractive child. Patzer (1985) felt that the cumulative folder technique was an acceptable method for studying physical attractiveness because, when teachers review students, they commonly receive an academic description and a photo in the student's record.

The cumulative folder procedure, however, is not without limitations. Relying on photographs for evaluating attractiveness may be problematic because photographs provide a static cue for basing attributions and evaluations. Providing only a static cue oversimplifies the conceptualization of attraction by viewing it as a unidimensional construct. Argyle and McHenry (1971) argued that photographs and brief exposure time do not simulate a real world situation. In Argyle and McHenry's study, subjects viewed an individual with or without glasses for either a brief duration (15 seconds) or an extended interval (5 minutes). Individuals wearing glasses were evaluated as

having higher IQs when they were seen for only 15 seconds but not when they were viewed for the extended duration. The authors stated that experiments in person perception that use photographs or only brief exposure time lack external validity.

Other cues such as dynamic expressive style, body attractiveness, and attractiveness of dress contribute to forming impressions of overall attraction (Riggio, Widaman, Tucker, & Salinas, 1991). These cues are typically neglected in attractiveness research. On the other hand, Zajonc (1980) claimed that clear affective reactions to another person can develop in just a fraction of a second. Of course, it is possible that both positions are correct. That is, judgments may be formed in a few seconds or less, but, nevertheless, those judgments may well change when the target person is presented for a sustained period of time.

The effects of physical attractiveness have been studied with respect to a wide variety of judgments, including: (a) intelligence and academic potential, (b) grades and achievements, (c) various social skills, and (d) miscellaneous attributions. To facilitate the description and analysis of this research, Table 1 provides a summary of the empirical studies. The table is organized in terms of the characteristics of the students sampled, the gender and race of the teacher and subjects, and the judgments and ratings completed by the subjects.

Intelligence and Academic Potential Attributions

Clifford and Walster (1973) employed the cumulative folder technique in their pioneering study of physical attractiveness and teacher expectancies. Folders were distributed to 404 male and female elementary school teachers. Each folder contained a photograph of an attractive or an unattractive child and an academic report of a child. The content of the report was held constant, and each child was described as a B student. Compared to unattractive children, physically attractive children were: (a) rated as more intelligent, (b) believed to have higher academic potentials, and (c) believed to have parents with a higher interest in education.

In another study, Thompkins and Boor (1980) failed to find significant differences in teachers' attributions of intelligence between physically attractive and unattractive male students. The authors suggested that a possible reason for the discrepancy between their findings and Clifford and Walster's (1973) results was the design of the questionnaires. Subjects in their study rated academic attributes and social attributes on separate pages, whereas subjects in Clifford and Walster's study did not. Thompkins and Boor argued that rating attributes on separate pages prevented a halo effect. Nevertheless, other research clearly shows that teachers expect physically attractive students to be more intelligent and to attain a higher level of education than less physically attractive students (e.g., Adams, 1978; Brophy & Evertson, 1981; Clifford, 1975; Clifton & Baksh, 1978; DeMeis & Turner, 1978; Hore, 1971; Roland, 1977). For example, Adams interviewed teachers individually reading them a statement about a child and showing them a photograph and asking them to indicate how they felt the child would most likely do in the classroom. Other research (e.g., Clifford, 1975) used methodology similar to Clifford and Walster's.

Although the physical attractiveness effect seems fairly robust, it may, in fact, be affected by the range of attractiveness sampled by researchers. Most studies employ a simple contrast between high and low attractiveness, but a few studies have included moderate attractiveness. For example, DeMeis and Turner (1978) found that moderately attractive male students were expected to have higher academic performances

TABLE 1

A classification of studies on physical attractiveness in students

Study	Students' characteristics											Teacher-Subjects				Judgments and ratings ^b				
	Attractiveness level		Gender			Educational level				Race ^a		Gender ^a		Race ^a		Intell	Acad poten	Grades	Social skills	Other
	L	M	H	M	F	Pre-4	5-8	High school	Coll	Black	White	M	F	Black	White					
Adams, 1978	X		X	X	X	X				X	X		X	X	X	+	+			
Adams & Cohen, 1974	X		X	X	X	X	X												+	
Adams & Cohen, 1976	X		X	X	X	X					X	X	X						+	+
Adams & LaVoie, 1974	X	X	X	X	X		X				X	X	X							0
Barocas & Black, 1974	X		X	X	X	X					X									+
Brophy & Evertson, 1981	X		X	X	X	X	X				X		X	X	X	+	+			
Clifford, 1975																				
Study 1	X		X	X	X	X										+	+			+
Study 2	X		X	X	X	X	X											0		
Clifford & Walster, 1973	X		X	X	X		X				X	X	X			+	+		+	+
Clifton & Baksh, 1978	X		X	X	X		X				X	X	X			+	+		+	+
DeMeis & Turner, 1978	X	X	X	X			X			X	X		X		X		+			
Dion, 1970	X		X	X	X	X						X	X							-
Dion, 1972	X		X	X	X	X					X	X	X						+	-
Felson, 1980	X		X	X	X			X			X	X	X			+	+			
Hore, 1971	X		X	X	X		X				X	X	X	X	X	0	0			
Kehle et al., 1974	X		X	X	X		X				X	X	X							0
LaVoie & Adams, 1974	X	X	X	X	X		X				X	X	X	X	X					0
Marwit, 1982	X		X	X			X				X	X	X	X	X					+
Marwit et al., 1978	X		X	X					X		X	X								
Morrow & McElroy, 1984	X		X	X	X										X	+				
Rich, 1975	X		X	X	X	X					X	X	X		X		+			-
Roland, 1977	X		X	X	X			X			X									
Ross & Salvia, 1975	X		X	X	X	X	X				X							+	+	
Salvia et al., 1977	X		X	X	X				X									0		
Singer, 1964	X		X	X	X				X			X	X							
Sparacino & Hansell, 1979	X		X	X	X														+	+
Stohl, 1981	X		X	X	X	X					X	X	X			0	0		+	
Thompkins & Boor, 1980	X		X	X			X													
Zahr, 1985	X		X	X	X	X	X				X							+		

^a If there is no entry, either gender or race was not reported.^b For judgments and ratings, + reflects a more positive judgment or evaluation with greater attractiveness; 0 reflects no relationship or a mixed one (e.g., present for females, but not for males), - reflects a more negative judgment with increased attractiveness.

and higher academic potentials than either high or low physically attractive male students. Nevertheless, consistent with the majority of research, highly physically attractive students were expected to have higher academic performances and higher academic potentials than low physically attractive students. Adams and LaVoie (1974) also found that teachers expected moderately attractive male and female students to have better work habits than either high or low physically attractive students. Thus, although highly physically attractive students fared better than unattractive students on judgments of intelligence and academic potential, moderately attractive students (in two studies) were judged more favorably than both highly attractive and unattractive students.

Grades and Achievement

In studies conducted across all educational levels with elementary students (Salvia, Algozzine, & Sheare, 1977; Zahr, 1985), high school students (Felson, 1980), and college females (Singer, 1964), physically attractive students usually received higher grades and/or higher achievement scores on standardized tests than unattractive students. There were a few exceptions to this pattern. For example, Clifford (1975) failed to find a significant relationship between attractiveness and grades for students in grades 2–6. It should be noted that, in the Clifford study, teachers showed considerable disagreement in rating the students' physical attractiveness. Thus, the reduced reliability in judging the attractiveness of students might account for the discrepant findings.

In a college student sample, Sparacino and Hansell (1979) failed to find a relationship between attractiveness and grades. The authors suggested that college students enrolled in large introductory lecture classes, with relatively little contact with their instructors, might have provided an overly conservative test of possible biasing effects. Nevertheless, Singer (1964) did find a significant positive correlation between GPA and attractiveness in a sample of college females enrolled in a large class. Of course, if physically attractive individuals are treated differently and do obtain better grades earlier in elementary and high school, the effect would be likely to continue into college in spite of large class size and lack of contact with the instructor.

Social Skills

Teachers' evaluative judgments about personality and social skills are also influenced by physical attractiveness. Studies of both preschool and elementary school students found that attractive students were rated (a) more friendly, (b) more attentive, (c) more popular, and (d) more outgoing (e.g., Adams & Cohen, 1974, 1976; Clifford & Walster, 1973; Clifton & Baksh, 1978; Stohl, 1981; Thompkins & Boor, 1980).

Other Judgments

Teachers also make a variety of other judgments about students (e.g., special referrals, conduct) in addition to those on academic matters and social skills dimensions. Physical attractiveness may also play a role in these judgments.

Special referrals. Students who do not meet academic expectations for a particular education level are often recommended for special services. In theory, placement for special services is usually due to language deficits, learning disabilities, behavior problems, or low test scores. In practice, physical attractiveness may play a role in

referrals. In a study by Ross and Salvia (1975), 76 teachers viewed facial photographs of 120 third-grade children rated as attractive or unattractive. A fictitious psychological report presented evidence of below average intellectual functioning and no significant behavioral problems. Teachers were more willing to recommend placement for an unattractive than an attractive child. Ross and Salvia concluded that the attractive child was given the benefit of the doubt in proving his or her academic ability.

In a similar study, the opposite pattern was found—attractive students were more frequently recommended for placement (Barocas & Black, 1974). Barocas and Black suggested that physical attractiveness created additional opportunities for those individuals, and thus it was the attractive individuals who received help. It is interesting that, although these two studies reported directly opposing patterns of recommendations, both were viewed as reflecting a positive bias for the physically attractive students.

Conduct. In addition to teaching and performance review, teachers are also responsible for disciplinary action. In two experiments (Dion, 1970, 1972), teachers were given fictitious reports about elementary school students' transgressions. A photograph of an attractive or unattractive student was attached to the report. Each teacher was instructed to read the report, evaluate the seriousness of the disturbance, and give general impressions of the student. When the reported transgression was mild, the physical attractiveness of the students did not affect the reaction of the teacher. When the disturbance was severe, however, the teacher assumed that the unattractive boys and girls were chronically antisocial in their everyday behavior. In contrast, this assumption was not made for attractive students who committed the serious misconduct. In this case, it was assumed that the attractive students were having a bad day.

Adams and LaVoie (1974) had teachers in grades 1–6 review a student progress report containing a photograph of a highly attractive, moderately attractive, or an unattractive student and a conduct report. Compared to students with good conduct ratings, students with poor conduct ratings were perceived as having (a) parents who were less interested in education, (b) fewer peer relationships, (c) lower academic potentials, and (d) poorer work habits. The results indicated that predictions on all measures were significantly influenced by conduct, but physical attractiveness exerted little influence. Thus, conduct may exert a stronger bias on teacher expectations than physical attractiveness (e.g., LaVoie & Adams, 1972, 1974).

Miscellaneous attributions. The effect of physical attractiveness on teachers' judgments even extends beyond the students themselves. In two studies, teachers judged that the parents of highly attractive children (a) care more about education, (b) set high education goals for the child, (c) push for excellence in academics, and (d) expect their children to excel (Clifford, 1975; Clifton & Baksh, 1978). To the extent that teachers do interact with parents about their children's academic records, these more pervasive positive expectancies may also facilitate more favorable outcomes for the attractive children.

Meta-Analysis

A meta-analysis of the reviewed studies was conducted in an attempt to arrive at a quantitative assessment of the effects described so far.¹ Thus, the meta-analysis complements this descriptive review.

The meta-analysis was accomplished in two steps. First, in the studies with the appropriate summary statistics, the overall effect size was calculated for physical attractiveness and for the dependent measures including intelligence, future academic potential, grades, social skills, special referrals, and conduct. Because there were relatively few studies involved, the dependent measures were grouped into two categories. Intelligence, future academic potential, and grades constituted the academics category, whereas social skills constituted the second category.

The mean and the variance of the effect size estimates were calculated for each of the dependent measures. Next, the expected variance due to sampling error was subtracted from the observed variance, using the procedure outlined by Hunter, Schmidt, and Jackson (1982). Cohen's (1977) guidelines regarding size of effects were used in interpreting the results of this study. Specifically, Cohen refers to a d value of .20 as a small effect size, .50 as a medium effect size, and .80 as a large effect size.

A total of 17 studies reported the appropriate statistics necessary for examining an overall effect size. The \bar{d} was .41, approaching a medium effect size. The effect size was, however, inconsistent across studies, suggesting that moderator variables (e.g., gender, age, race) might be affecting the variation.

The specific relationship between student attractiveness and teacher judgments for academic measures (e.g., intelligence, future academic potential, grades) was assessed in 12 studies. The \bar{d} was .36, approaching a medium effect size. The results were similar to Dusek and Joseph's (1985) meta-analysis of physical attractiveness and academic expectations ($\bar{d} = .30$). The relationship between student attractiveness and social skills was assessed in four studies. The \bar{d} was .48, indicating a medium effect size.

In summary, the meta-analysis of the studies that provided the appropriate statistics approached a moderate effect size of physical attractiveness on teacher judgments. Furthermore, the effect of physical attractiveness on social skills judgments may have been somewhat greater than the effect of physical attractiveness on academic judgments.

Moderator Influences

Although the effect of physical attractiveness on teacher judgments is a robust one, other factors may moderate that influence. Gender is one factor that may interact with attractiveness to affect teacher judgments. Compared to females, males are called on more frequently and given more attention (e.g., Hall & Sandler, 1984; Sadker & Sadker, 1984). Girls, however, tend to be favored by their teachers, perhaps because of the stereotype of the quiet and passive female (Worrall, Worrall, & Meldrum, 1988).

The evidence of the interaction of physical attractiveness and gender on teacher judgments of intelligence, academic potential, and academic performance is mixed. Kehle, Bramble, and Mason (1974) gave teachers photographs of attractive or unattractive elementary school students and had the teachers rate the essay performance and personality characteristics of the students. Teachers held higher expectations for attractive, White females than they did for the attractive, White males. Other studies also found that the physical attractiveness effect was stronger for females than for males (e.g., Adams, 1978; Hore, 1971). Rich (1975) reported, however, that attractive boys were rated as more intelligent than either unattractive

boys or attractive girls. Unattractive girls were judged as second most intelligent, ahead of unattractive boys and attractive girls. Because the subjects in Rich's study were female teachers, in contrast to both male and female teachers in other studies (e.g., Hore, 1971; Kehle, Bramble, & Mason, 1974), subject gender might partially account for Rich's findings. It should be noted, however, that the teachers in the Adams (1978) study were also only females.

Other studies on physical attractiveness and teacher expectancies have not found significant gender differences in judgments between attractive and unattractive students (e.g., Clifford & Walster, 1973; Clifton & Baksh, 1978; Felson, 1980; Salvia, Algozzine, & Sheare, 1977). That is, the physically attractive student, regardless of gender, was rated as more intelligent and higher in academic potential.

Race is another potent source of input into teachers' impressions. The influence of racial stereotypes in teacher expectancies was first suggested by Kenneth Clark in 1963. Later research found that teachers (a) rated Black students less favorably, (b) treated Black students less favorably in the classroom, and (c) held lower academic expectations for Black students than they did for White students (e.g., Cooper, Baron, & Lowe, 1975; DeMeis & Turner, 1978; Rubovits & Maehr, 1973). Furthermore, in a study of the perception of facial beauty, Cross and Cross (1971) found that Blacks were rated less positively than Whites by both Black and White raters.

Adams (1978) interviewed 112 Black and 128 White Head Start teachers with regard to initial teacher expectancies based on physical attractiveness, gender, and race. The results indicated that teachers believed physically attractive students were more intelligent and were higher achievers. In addition to the physical attractiveness effects, White students and girls were rated as more intelligent and as higher achievers than were Black students and boys. The author concluded that, although the attractiveness of an individual influenced the initial expectation of the preschool teachers, race exerted the strongest influence. Kehle, Bramble, and Mason (1974) had previously found similar effects for attractive, White females compared to Black females and males.

In an investigation of the effects of race and attractiveness on judgments of males' transgressions, attractiveness only affected judgments of the Black students (Marwit, 1982). Specifically, elementary school teachers judged the transgressions of attractive, Black males less severely than those of unattractive Black and White males. Marwit's reanalysis of data from an earlier study (Marwit, Marwit, & Walker, 1978) revealed a similar effect for Black males.

In another study of race and attractiveness, DeMeis and Turner (1978) examined teachers' judgments of a sample of elementary school males. The interaction of race and attractiveness indicated that moderately attractive Black and White males were expected to have higher academic potentials and higher academic performances than either high or low physically attractive students. Unfortunately, this is the only study that included a moderate level of attractiveness in combination with race.

Another variable that has been studied in combination with attractiveness is the student's past performance (e.g., Morrow & McElroy, 1984). Teachers often form expectations based on school records. Most information in school records is accurate and likely to induce accurate teacher expectations (Brophy, 1982). Morrow and McElroy assessed the impact of physical attractiveness, gender, and past performance on teachers' evaluations of students. Past performance accounted for the greatest percentage of the variation in ratings. Males and females who had repeatedly

performed well in the past were evaluated favorably. Attractive individuals who had not performed well in the past were rated only slightly higher than unattractive individuals with low past performances. The magnitude of the bias, however, was quite small. The authors concluded that the effect of physical attractiveness was a marginal one.

Discussion

The studies reviewed here clearly show that highly physically attractive students, compared to their unattractive counterparts, are the beneficiaries of more favorable judgments by teachers. This attractiveness effect is reflected in teachers' more positive expectancies of physically attractive students in terms of their intelligence, academic potential, grades, and other attributes. The results of this meta-analysis suggest that this effect is small to moderate in size, with a somewhat greater effect on social skills judgments than on academic judgments. Although other student characteristics such as gender, race, and past performance also affect teacher evaluations, their role in moderating the attractiveness effect was not clear-cut in the studies reviewed. Thus, there was no consistent pattern of interaction effects involving attractiveness and these other variables. This is probably not surprising given the relatively small number of studies that examined interaction effects and the considerable differences across studies in other factors, including the ages of the students sampled and the dimensions on which students were judged.

Is the physical attractiveness effect simply a perceiver bias, or is there some reality behind the more favorable judgments made of physically attractive students? Results of studies on attractiveness and actual achievement show that, across grade levels, more attractive students usually receive higher grades and higher scores on standardized achievement tests than do less attractive students (Felson, 1980; Salvia, Algozzine, & Sheare, 1977; Singer, 1964; Zahr, 1985). It seems unlikely that such differences are merely the result of grading biases by teachers, especially in the case of standardized tests. Rather, it is more likely that a self-fulfilling prophecy initiated by teachers can result in real performance improvement by attractive students. Although Elashoff and Snow (1971) are critical of Rosenthal and Jacobson's (1968) initial work on the self-fulfilling prophecy, they do recognize that teacher expectancy "may affect pupil achievement especially if a strong teacher expectancy exists naturally or if the induction is strong and a close simulation of natural conditions" (p. 61).

Even though teachers' expectancies might influence academic performance, a self-fulfilling prophecy effect might be initiated well before children enter school. For example, parents' attitudes toward their own infants are affected by the attractiveness of the child (Ottinger & Berman, 1989; Stephan & Langlois, 1984). Consequently, such early positive expectancies for attractive preschool children may lead to real differences in achievement that are already in place as children enter school and are simply reinforced by teachers over time. In such a case, teachers' expectancies accurately predict student performance (Jussim, 1989).

If there are real differences in achievement that favor attractive children, regardless of their origin, related judgments of intelligence and academic potential that also favor attractive children are not surprising. That is, if teachers correctly perceive achievement differences as a function of attractiveness, then taking the next step and making attributions of higher intelligence and greater academic potential are understandable. Of course, such attributions may also be self-fulfilling, if students are affected by these expectancies and act in such a way as to accomplish them.

The effects described here reflect the differences in teachers' judgments of highly attractive and unattractive students across a variety of studies. There is, however, reason to question a simple linear relationship between a student's attractiveness and the favorability of teacher judgments. There were only three studies (see Table 1) in which moderate levels of attractiveness were used. Furthermore, in two of them, the moderately attractive students received more favorable evaluations than both the unattractive and highly attractive students (Adams & LaVoie, 1974; DeMeis & Turner, 1978). It may well be that moderately attractive students are viewed more positively than even highly attractive students, but more studies will have to sample moderate levels of attractiveness before this issue is resolved. This circumstance also reflects a limitation in the external validity of the research because most students fall somewhere between the extremes of attractiveness. In addition, parametric studies examining student gender, race, and age are necessary to determine how these factors might interact with attractiveness.

In conclusion, although the consequences of students' physical attractiveness are clearly documented, the processes mediating these effects are not well understood. Perhaps the most interesting question for future research is a developmental one. That is, when do attractiveness effects, both on actual achievement and on intellectual and social judgments of others, begin to emerge and how do they change over time? The pursuit of such a question should help to determine how much of the attractiveness effect seen in academic settings is the result of self-fulfilling prophecies on the part of teachers and how much reflects a preexisting reality. In fact, Jussim's (1991) recent reflection-construction model of social perception and social reality suggests that apparent expectancy effects are more likely to be the result of the accurate prediction of reality than of self-fulfilling prophecy or biases. To the extent that teachers are correct in their judgments, it is still important to determine if the attractiveness effect is the product of even earlier self-fulfilling expectancies by parents and others or if attractiveness might, in some way, be innately related to intellectual and social skills. The latter possibility should not be overlooked in attempts to understand this important effect.

Note

¹Because the majority of studies reviewed here involved only the manipulation of high versus low levels of attractiveness, we employed the analysis designed for dichotomous variables as outlined by Hunter, Schmidt, and Jackson (1982). Thus, the three studies employing moderate levels of attractiveness were not included in the meta-analysis.

References

- * Adams, G. R. (1978). Racial membership and physical attractiveness effects on preschool teachers' expectations. *Child Study Journal*, 8, 29-41.
- Adams, G. R., & Cohen, A. S. (1974). Children's physical and interpersonal characteristics as they affect student-teacher interactions. *Journal of Experimental Education*, 43, 1-6.
- * Adams, G. R., & Cohen, A. S. (1976). Characteristics of children and teacher expectancy: An extension of the child's social and family life. *Journal of Educational Research*, 70, 87-91.
- Adams, G. R., & LaVoie, J. C. (1974). The effect of student's sex, conduct, and facial attractiveness on teacher expectancy. *Education*, 95, 76-83.
- Argyle, M., & McHenry, R. (1971). Do spectacles really affect judgments of intelligence? *British Journal of Social and Clinical Psychology*, 10, 27-29.

- Barocas, R., & Black, H. K. (1974). Referral rate and physical attractiveness in 3rd grade children. *Perceptual and Motor Skills*, 39, 731-734.
- Benson, P. L., Karabenick, S. A., & Lerner, R. M. (1976). Pretty pleases: The effect of physical attractiveness, race, and sex on receiving help. *Journal of Experimental Social Psychology*, 12, 409-419.
- Braun, C. (1976). Teacher expectations: Sociopsychological dynamics. *Review of Educational Research*, 46, 185-213.
- Brophy, J. E. (1982). Research on the self-fulfilling prophecy and teacher expectations. *Journal of Educational Psychology*, 75, 631-661.
- Brophy, J. E., & Evertson, C. M. (1981). *Student characteristics and teaching*. New York: Longman.
- Brophy, J. E., & Good, T. L. (1974). *Teacher-student relationships*. New York: Holt, Rinehart, & Winston.
- Clark, K. (1963). Educational stimulation of racially disadvantaged children. In A.H. Sassow (Ed.), *Education in depressed areas* (pp. 142-162). New York: Teachers College.
- * Clifford, M. M. (1975). Physical attractiveness and academic performance. *Child Study Journal*, 5, 201-209.
- * Clifford, M. M., & Walster, E. (1973). The effect of physical attractiveness on teacher expectations. *Sociology of Education*, 46, 248-258.
- * Clifton, R. A., & Baksh, I. J. (1978). Physical attractiveness, year of university, and the expectations of student-teachers. *Canadian Journal of Education*, 3, 37-46.
- Cohen, J. (1977). *Statistical power analyses for the behavioral sciences*. New York: Academic.
- Cooper, H., Baron, R., & Lowe, C. (1975). The importance of race and social class in the formation of expectancies about academic performance. *Journal of Educational Psychology*, 69, 409-418.
- Cross, J. F., & Cross, J. (1971). Age, sex, race, and perception of facial beauty. *Developmental Psychology*, 5, 433-439.
- DeMeis, D. K., & Turner, R. R. (1978). Effects of student's race, physical attractiveness, and dialect on teacher evaluations. *Contemporary Educational Psychology*, 3, 77-86.
- Dion, K. (1970). Social desirability and the evaluation of a harm-doer. *Dissertation Abstracts International*, 32, 534A.
- * Dion, K. (1972). Physical attractiveness and evaluation of children's transgressions. *Journal of Personality and Social Psychology*, 24, 207-213.
- Dion, K., Berscheid, E., & Walster, E. (1972). What is beautiful is good. *Journal of Personality and Social Psychology*, 24, 285-290.
- Dipboye, R. L., Arvey, R. D., & Terpstra, D. E. (1977). Sex and physical attractiveness of raters and applicants as determinants of resume evaluations. *Journal of Applied Psychology*, 62, 288-294.
- Dusek, J. B. (Ed.). (1985). *Teacher expectancies*. Hillsdale, NJ: Erlbaum.
- Dusek, J. B., & Joseph, G. (1985). The basis of teacher expectancies. In J.B. Dusek (Ed.), *Teacher expectancies* (pp. 229-250). Hillsdale, NJ: Erlbaum.
- Elashoff, J. D., & Snow, R. E. (1971). *Pygmalion reconsidered: A case study in statistical inference: Reconsideration of the Rosenthal & Jacobson data on teacher expectancy*. Worthington, OH: Charles A. Jones.
- * Felson, R. B. (1980). Physical attractiveness, grades and teacher attributions of ability. *Representative Research in Social Psychology*, 11, 64-71.
- Finn, J. D. (1972). Expectations and the educational environment. *Review of Educational Research*, 42, 387-410.
- Franzoi, S. L., & Herzog, M. E. (1987). Judging physical attractiveness: What body aspects do we use? *Personality and Social Psychology Bulletin*, 13, 19-33.
- Hall, R. M., & Sandler, B. R. (1984). A chilly climate in the classroom. In A.G. Sargent (Ed.), *Beyond sex roles* (pp. 503-510). St. Paul, MN: West.
- Hore, T. (1971). Assessment of teaching practices: An "attractive" hypothesis. *British Journal of Educational Psychology*, 4, 327-328.
- Hunter, S. E., Schmidt, F. L., & Jackson, G. B. (1982). *Meta-analysis: Cumulating research findings across studies*. Beverley Hills, CA: Sage.
- Jussim, L. (1989). Teacher expectations: Self-fulfilling prophecies, perceptual biases, and accuracy. *Journal of Personality and Social Psychology*, 57, 469-480.
- Jussim, L. (1991). Social perception and social reality: A reflection-construction model. *Psychological Review*, 98, 54-73.
- * Kehle, T. J., Bramble, W. J., & Mason, E. J. (1974). Teachers' expectations: Ratings of students' performance as biased by student characteristics. *Journal of Experimental Education*, 43, 54-60.
- LaVoie, J. C., & Adams, G. R. (1972). The chosen ones: A study of the effects of children's conduct, sex, and facial attractiveness on teacher expectations (Research Report). Omaha: University of Nebraska.
- LaVoie, J. C., & Adams, G. R. (1974). Teacher expectancy and its relation to physical and interpersonal characteristics of the child. *Alberta Journal of Educational Research*, 20, 122-132.
- * Marwit, K. L., Marwit, S. J., & Walker, E. (1978). Effects of student race and physical attractiveness on teachers' judgments of transgressions. *Journal of Educational Psychology*, 70, 911-915.
- * Marwit, S. J. (1982). Students' race, physical attractiveness and teachers' judgments of transgressions: Follow-up and clarification. *Psychological Reports*, 50, 242.
- Morrow, P. C., & McElroy, J. C. (1984). The impact of physical attractiveness in evaluative contexts. *Basic and Applied Social Psychology*, 5, 171-182.
- Ottinger, D. R., & Berman, S. G. (1989, May). *The perceived attractiveness of the preterm infant at the time of hospital discharge*. Paper presented at the Midwest Psychological Association Conference, Chicago.
- Patzner, G. (1985). *The physical attractiveness phenomena*. New York: Plenum.
- * Rich, J. (1975). Effects of children's physical attractiveness on teacher evaluations. *Journal of Educational Psychology*, 67, 599-609.
- Riggio, R. E., Widaman, K. F., Tucker, J. S., & Salinas, C. (1991). Beauty is more than skin deep. *Basic and Applied Social Psychology*, 12, 423-439.
- Roland, C. (1977). Students' facial attractiveness as a factor in teacher and counselor expectations. *Dissertation Abstracts International*, 37, 3296-3297A.
- Rosenthal, R., & Jacobson, L. (1968). *Pygmalion in the classroom: Teacher expectation and pupils' intellectual development*. New York: Holt, Rinehart, & Winston.
- * Ross, M. B., & Salvia, J. (1975). Attractiveness as a biasing factor in teacher judgments. *American Journal of Mental Deficiency*, 80, 96-98.
- Rubovits, P. C., & Maehr, M. L. (1973). Pygmalion in black and white. *Journal of Personality and Social Psychology*, 25, 210-218.
- Sadker, M., & Sadker, D. (1984). Striving for equity in classroom teaching. In A.G. Sargent (Ed.), *Beyond sex roles* (pp. 442-455). St. Paul, MN: West.
- * Salvia, J., Algozzine, R., & Sheare, J. B. (1977). Attractiveness and school achievement. *Journal of School Psychology*, 15, 60-67.
- Sigall, H., & Ostrove, N. (1975). Beautiful but dangerous: Effects of offender attractiveness and nature of the crime on juristic judgments. *Journal of Personality and Social Psychology*, 31, 41-414.
- * Singer, J.E. (1964). The use of manipulative strategies: Machiavellianism and attractiveness. *Sociometry*, 27, 128-150.
- * Sparacino, J., & Hansell, S. (1979). Physical attractiveness and academic performance: Beauty is not always talent. *Journal of Personality*, 44, 449-469.
- Stephan, C. W., & Langlois, J. H. (1984). Baby beautiful: Adult attributions of infant competence as a function of infant attractiveness. *Child Development*, 55, 576-585.
- * Stohl, C. (1981). Perceptions of social attractiveness and communication style: A developmental study of preschool children. *Community Education*, 30, 367-376.

Ritts, Patterson, and Tubbs

- Thompkins, R. C., & Boor, M. (1980). Effects of students' physical attractiveness and name popularity on student teachers' perceptions of social and academic attributes. *Journal of Psychology, 106*, 37-42.
- Worrall, N., Worrall, C., & Meldrum, C. (1988). Children's reciprocations of teacher evaluations. *British Journal of Educational Psychology, 58*, 78-88.
- * Zahr, L. (1985). Physical attractiveness and Lebanese children's school performance. *Psychological Reports, 56*, 191-192.
- Zajonc, R. B. (1980). Feeling and thinking: Preferences need no inferences. *American Psychologist, 35*, 151-175.

* Articles used in the meta-analysis.

Authors

VICKI RITTS is Lecturer, Southern Illinois University-Edwardsville and Florissant Valley Community College, and PhD Candidate, University of Missouri-St. Louis, St. Louis, MO 63121. She specializes in experimental social psychology.

MILES L. PATTERSON is Professor, University of Missouri-St. Louis, St. Louis, MO 63121. He specializes in social psychology.

MARK E. TUBBS is Associate Professor, University of Missouri-St. Louis, St. Louis, MO 63121. He specializes in industrial and organizational psychology.

Received March 3, 1992

Revision received August 20, 1992

Accepted August 25, 1992